The Decision

1. The application is allowed.

2. The right of action of the plaintiff Amadeu Goncalves is taken away by Part I of the Act.

3. The right of action of the plaintiff Maria Rodrigues Goncalves, being a derivative action under the *Family Law Reform Act*, is also taken away.

Application allowed.

DECISION NO. 214/88

Panel: Kenny (Chairman), McCombie, Ronson

Decision – May 13, 1988.

Disablement (working conditions) – Climate (sealed building) – Sealed building syndrome – Office worker.

Office worker developing throat irritation from working environment in sealed building – Worker entitled to benefits for sealed building syndrome caused by poor ventilation, periodically high temperature and low humidity.

An office worker began to experience throat irritation in 1981. After 1981, this periodically caused him to have a persistent cough with associated dizziness and headaches as well as nausea and diarrhea. The worker claimed that this throat problem was caused or aggravated by the sealed office environment in which he worked. The worker appealed a decision of the appeals adjudicator denying entitlement for the throat disability and accompanying symptoms. The appeal was allowed.

The worker worked for the employer for about 18 years. However, until 1978, he spent most of his time out of the office. The employer moved to its present location in 1980 or 1981. The worker worked in a window office but the ventilation outlets were located in the interior offices and reception area.

The Ministry of Labour conducted air quality tests and found no excessive levels of contaminants. Carbon dioxide levels were well below the Ministry's "action level" but above the level at which it recommended that improvements in ventilation be made.

Sealed building syndrome describes a variety of health complaints which have been made by a higher than normal proportion of workers working in particular office buildings. It appeared that poor ventilation combined with periods of high temperature and low humidity may be responsible for increased complaints in some cases.

The panel found that the worker had a pre-existing non-compensable dryness of the mucous membrane throughout the anterior part of his nose, mouth and throat, due to inadequate production of saliva. However, the worker's work environment, which was periodically unusually hot and dry, aggravated the worker's underlying condition.

The worker was entitled to benefits for periods when he was disabled as a result of aggravation of his condition.

Statutes considered
Workers' Compensation Act, R.S.O. 1980, c. 539 –
s. 1(1)(a)(iii), as am. 1982, c. 61, s. 2
s. 3(1), as re-en. 1984, c. 58, s. 3
s. 40, as am. 1982, c. 61, s. 2

Authorities considered
Eluchok, Bill, "Industrial research hygienist has 'sick' buildings for patients" (London Free Press).
Glasbeek, Sandra, "Office Air Quality" (Ontario Ministry of Labour, 1984).
Mitchell, Harris, "Which Heat is Driest" (London Free Press, 1987).
Sullivan, J.L., "Air Pollutants in the Office", 1984.

APPEAL by the worker from a decision of the appeals adjudicator

denying entitlement to benefits.

May 13, 1988. THE TRIBUNAL: –

The Appeal Proceedings:

The worker appeals the June 21, 1985 decision of appeals adjudicator S. Rudderham. The appeals adjudicator found that there was no relationship between the worker's employment and his throat disability and she therefore denied entitlement for the worker's throat disability and accompanying symptoms.

The worker appeared and represented himself. The employer was represented by B. Armstrong of the office of the employer adviser. R. Smith attended the hearing as an observer on behalf of the employer.

The Evidence

The worker, a co-worker, and a worker who worked for another employer in the same building testified. The panel also reviewed the case description and two addenda to the case description. Both the worker and Mr. Armstrong made submissions.

The Nature of the Case

In approximately 1981, the worker began to experience throat irritation. After 1981 he said this periodically caused him to have a persistent cough with associated dizziness and headaches as well as nausea and diarrhea. He also had times when he said he experienced slurred speech. In 1983, the worker filed a report with his employer. He said that he felt he had a throat problem which may be caused or aggravated by the sealed condition of his office environment.

The worker says that he has suffered from "sealed building syndrome" (sometimes referred to as "sick building syndrome"). He asked this panel to declare it to be a disability and find it to be compensable. He also asked that he be found to be entitled to benefits for sick days he has taken because of his disability.

The employer's representative argued that there was not a sufficient number of workers with complaints to establish that this building was a "sick" building. In any event, he says that the symptoms the worker suffered were not characteristic of sealed building syndrome. The employer's representative argued that the worker suffered from xerostomia (dryness of the mouth) and this was non-compensable. He said the worker would not have had a problem working in this environment unless he had xerostomia, and since the work environment was a normal one, his disability was therefore non-compensable.

The appeals adjudicator found that there was no relationship between the worker's employment and his throat disability.

This panel was therefore required to decide:

1. whether the worker was disabled by a throat disability and accompanying symptoms;

2. if so, did the disability arise out of and in the course of his employment? or, alternatively, was he disabled by an industrial disease which was due to the nature of his employment?

The Panel's Reasons

(i) The Disability

The worker has worked for his present employer for about 18 years.

The worker testified that, until 1978, most of his working time was spent outside the office. After that, the amount of time he spent in the office increased until now approximately 80 per cent of his time is spent in the office.

The employer moved its offices to the present location in abut 1980 or 1981. The office building was new when it moved in. The employer's offices are now located on four floors of this nine storey office building.

The Ministry of Labour first tested the office air quality in June 1982. At that time, the worker was working on the 7th floor of the building. Shortly after this, he moved to an office on the ground floor of the building.

The worker says that he began to notice a tickle in his throat in late 1981. In 1981 and 1982 this problem worsened and he developed a cough. By December 1983, he had developed a persistent cough which was so persistent that he would develop headaches and dizziness. Nausea and diarrhea were also associated with the coughing.

The worker testified that he would have this problem from the fall to the spring of each year. The cough was more likely to develop in the afternoon and it would be more likely to occur when he was in the office most of the day. He sometimes achieved relief with fresh air.

He found that the problem would improve when he went home but sometimes he continued to cough after he was home. Over the weekends when he was not working, it would improve but it was not always cleared up by Sunday.

The worker submitted a complaint to his employer in December 1983. At that time, he described his condition as follows:

> "Progressively worsening bouts of uncontrollable coughing with severe headaches and head pain spasms whilst coughing – required medical attention to alleviate condition."

In the report that he filled out at that time he said that the cause of the problem was: "closed ventilation system at place of work."

The worker testified that it was his family doctor who first suggested that he may be suffering from "sealed building syndrome". The family doctor would not, however, say whether the worker's problem was work related when he was interviewed by a Board claims investigator, and he did not advise the investigator that the worker had "sealed building syndrome".

In January 1984, the worker lost time because of his cough and associated symptoms. His family doctor provided the following information about this:

"January 19/84	–	wheezing, nausea, diarrhea, dry cough for three weeks, worse in the a.m., better at home – feels it is work related.
	–	diagnosis – recurring laryngitis.
	–	advised to avoid work environment to assess results.
February 2/84	–	feels better, no physical findings, still has cough."

Another note on file from the family doctor states that the worker was advised to stay off work and return on Monday, February 6, 1984.

In February 1984, the worker was examined by an otolaryngologist, Dr. Yue. Dr. Yue reported:

> "... [the worker] has the generalised dryness of the mucous membrane throughout the upper aero-digestive tract ... It is probable that he has an early onset of xerostomia. It is mainly due to the degeneration of the minor salivary glands in the upper aero-digestive tract. Since the beginning of last Fall, the dry and hot air inside may aggravate his condition .... At the moment, he has a fair amount of inflammation in the pharynx and the hypopharynx. This may have been causing the tickling sensation. The coughing spells have been mainly the normal reflexes in an attempt to clear out the mucous or tickling sensation in the throat. Apparently, this inflammation is the secondary infection as a result of the dryness."

Dr. Yue prescribed an antibiotic for the infection and an Organidin solution. The Organidin solution was to stimulate production of saliva. He also prescribed Tussiaminic DH for treatment of the coughing spells.

The worker testified that Dr. Yue's treatment largely controlled his symptoms.

He did, however, suffer a problem again in December 1985. At that time he reported that he experienced a recurrent tickle in his throat which developed into a sore throat, coughing and fever while he was on vacation. This condition improved. However, when he returned to work

in January 1986, he experienced a recurrence of the tickle, sore throat, uncontrollable spasmodic coughing and fever. This was not entirely relieved until January 31, 1986.

A doctor employed by the employer confirmed some of the problems the worker experienced at that time. She reported:

> "You did indeed have a severe, wracking cough for several days which clearly caused you significant discomfort and did inhibit your ability to work at your full capacity. I did approve you taking two half days sick leave on January 9 and 10 1986 as a consequence ...."

One of the worker's co-workers also testified that she was aware of the problem the worker had experienced with a persistent dry cough.

The worker testified that the treatment he received from Dr. Yue now controls his disability. He takes lemon juice to stimulate saliva production and he takes the Tussiaminic DH to prevent the coughing. This has controlled the coughing and the worker has not had further problems with the nausea, headache and diarrhea which was associated with the coughing. Although the worker continues to experience some periods of slurred speech, this appears to be fairly infrequent. He says it can happen two or three times in an afternoon or two to four times a week.

(ii) The Work Environment

(a) The Worker's Testimony

The worker produced a floor plan of the area where he works. There are a number of window offices with several interior offices and reception area. The worker has a west window office. The existing exhaust and ventilator outlets are located in the interior offices and the reception area. There are none in the window offices. The worker explained that in the window offices the air is heated or cooled by a wall mounted perimeter heating/cooling unit which simply re-circulates air – it does not bring in fresh air.

The worker testified that an adjacent office area occupied by another tenant is presently undergoing changes so that each of the window offices will have its own ventilation and exhaust fan.

The worker testified that the previous tenants had an open concept office in the space where the worker presently works. However, when the worker's employer occupied the premises, walls were erected so that the window offices had floor to ceiling walls. According to the worker, this meant that the fresh air which was entering the interior part of the office did not circulate to the window offices unless the window office doors were open.

The worker testified that due to the nature of his work his office door remains closed much of the day. During the day his door is closed

when he interviews clients and when he dictates. This means that his door is closed for 1/2 to 2/3 of the day.

The perimeter heating/cooling unit which is in the worker's office controls the temperature not only for the worker's office but also for a worker with an adjoining office. The adjoining office has north and west windows. The worker testified that this neighbouring office is therefore colder in winter. Consequently, to heat that office, the heat control in the worker's office is turned up. This means that the temperature of the worker's office in winter is high -- "approximately 80 degrees or so." However, once the heating goes off and the air conditioning is on, the temperature is reduced to a level which the worker finds to be comfortable.

The worker testified that there was no "no smoking" policy in the area where he works. He does, however, ask clients not to smoke in his office and there is a "no smoking" policy at staff meetings.

The worker testified that his problems occur from fall to March, but after March the frequency of problems diminishes. After the heating goes off and the air conditioning goes on he is "O.K.".

Although a number of the worker's co-workers spend a considerable amount of time out of the office, he was aware that three or four co-workers in his area (out of 14) had complaints which they associated with the work environment. Although they did not have complaints of a cough or symptoms similar to his, they complained about fatigue, itchy eyes, and the uncomfortable environment. He was also aware of concerns with respect to fatigue and overcrowding by co-workers on the 6th floor of the building.

(b) The Testimony of Other Witnesses

One of the worker's co-workers testified. She is a nurse. She worked with the worker when they worked together on the 7th floor of the building and she moved to the ground floor offices when the worker did. Her office is two offices removed from the worker's office.

When she was working on the 7th floor, this co-worker became concerned because several colleagues were complaining of fatigue, dizziness and headaches. She herself also felt some of these symptoms. She therefore contacted the health and safety branch of the Ministry of Labour and found out the proper procedure for having them look into the matter. She subsequently informed her union representative. He contacted personnel and an inspection by the Ministry of Labour was arranged in 1982.

The co-worker testified that she was aware of the worker's problems and she was also aware that approximately three co-workers working on the same floor as the worker complained - primarily about fatigue and lethargy in the afternoon.

The co-worker said that temperatures in the office are higher in the winter than they are in the summer - and that there was a temperature variation between offices. She also testified that the office was much

drier in winter and that the worker's office was hot in winter.

A worker who worked for another employer in an adjacent office area on the ground floor of the same building also testified.

She works indoors approximately 90 per cent of her working time. She has a window office on the southwest corner of the building. She said that she experiences fatigue in the afternoon and headaches and that the office is very dry and hot in the winter. She said that she took the temperature in her office the day before the hearing and it was 86 degrees.

She testified that one of her co-workers initiated complaints to the building manager about the ventilation. They lifted the ceiling tiles to get more air into their offices but this had not helped.

(c) The Ministry of Labour Air Quality Tests

The Ministry of Labour conducted air quality tests where the worker worked in 1982 and in 1984.

In 1982, the employer occupied the 5th, 6th, and 7th floors of the building. The Ministry sampled the air at several locations on each of these floors. It tested levels of carbon dioxide, carbon monoxide, formaldehyde, nitrous oxides, ozone, and total particulates. It found that there were no excessive levels of contaminants and on that basis it concluded that there was no readily apparent cause of the employee complaints.

The test results did, however, show carbon dioxide levels of 670 to 970 parts per million (ppm). The time-weighted average threshold limit value (TLV-TWA) for carbon dioxide is the time-weighted average concentration of carbon dioxide for a normal 8-hour workday or 40 hour work week to which nearly all workers may be repeatedly exposed, day after day, without adverse effect. The value set by the American Conference of Governmental Industrial Hygienists (ACGIH) is 5000 ppm. Thus, the level of carbon dioxide detected by the Ministry tests was well below this TLV-TWA. The level of carbon dioxide was therefore well below the amount which would, according to the ACGIH standards, be dangerous to health.

It has, however, been found that increased carbon dioxide levels may correlate with worker complaints - not because of the effect of the carbon dioxide itself but rather because the higher levels may be associated with inadequate ventilation.[1] The Ministry of Labour's position with respect to carbon dioxide levels is therefore as follows:

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[1]Glasbeek, Sandra (Manager, Strategic Policy Unit, Occupational Health and Safety Division, Ontario Ministry of Labour), "Office Air Quality" and Sullivan, John L., "Air Pollutants in the Office" (both papers were presented to the University of Western Ontario Conference on Environmental Concerns in Offices and Homes, September 24-25, 1984).

"In [the] case of carbon dioxide, the ACGIH Threshold Limit Value (TLV) of 5000 parts per million while protective of health, greatly exceeds the levels considered to be indicative of adequate office ventilation. For this reason, the Occupational Health and Safety Division has developed a guideline of an action level set at 1,000 parts per million as a measure of worker comfort in offices. However if a level of 600 parts per million is exceeded, the Division will recommend that improvements in ventilation be made."[2]

Thus, the carbon dioxide levels recorded by the Ministry where the worker was working in the spring of 1982 were at a level where the division would normally recommend that improvements in ventilation be made.

In 1982, the Ministry recommended that management preserve air circulation by ensuring proper office size, an acceptable number of employees in certain area, modifying partitions, barriers etc. and restricting smoking to certain areas. It also suggested that, when complaints arise, the fresh air supply could be timed to begin before 7 a.m.

In 1984, the Ministry again tested the air quality. This testing was apparently prompted by the worker's problems. The air quality tests were performed in July 1984. Again the levels of the air contaminants measured were all below the current Ontario guidelines. However, the afternoon test results in the worker's office showed 700 ppm carbon dioxide. Thus, the carbon dioxide level was such that the division would normally recommend improvements in ventilation.

The Ministry's medical consultant reported the following:

"The indoor air quality results on the days of measurement are, in general, within acceptable limits. A small increase in the fresh air supply would further improve the situation."

When tested in July 1984, the humidity in the building ranged between 48-62 per cent.

Both the worker and the co-worker testified that no known changes were made as a result of the two Ministry of Labour reports.

(d) The Ventilation

In 1982, the Ministry's hygienist reported that, according to the consulting engineering firm, the ventilation design of the building was within ASHRAE standards (the standard of the American Society of Heating, Refrigeration and Air Conditioning Engineers). He also reported that because of the solar heating system the rate of fresh air

[2]Glasbeek, Sandra (see footnote 1).

supplied did not fluctuate on a seasonal basis.

Nonetheless, another part of the Ministry report states that the cooling system was controlled by an automatic sensor which maintains the unit to produce air at 65 degrees. The temperature is adjusted with fresh air make-up. If the outside air temperature is 70 degrees or greater the damper remains at a maximum setting. This suggests that more fresh air would be supplied in summer.

This is also suggested by a February 29, 1984, report from the property manager. It states:

". . . we are providing a minimum of 20% outside air at all times with this ratio increasing as the need for cooling exists in the interior zone. It is the interior zone in the building that requires cooling most of the time and this is provided at this time of the year [February] and during all of the winter months by use of 100% outside air."

The worker also presented an article which explained that warm air can hold more moisture than cold air. It gives the following example of what this means when winter air is heated:

"Winter air at zero degrees Celsius and 80 per cent relative humidity (holding 80 per cent of its moisture capacity) brought indoors and heated to 20 degrees C will have a relative humidity of 17 per cent . . . because warm air can hold more moisture than cold air."[3]

(iii) Medical Evidence re Causation

(a) The Literature

The worker presented several articles and newspaper clippings dealing with the "sealed building syndrome".[4] These articles identify a number of physical complaints which some workers in some office buildings have made.

One of the articles supplied by the worker sets out the following as common features of "sick building syndrome".

" – complaints of eye, nose, throat and skin irritation, headaches, fatigue, dizziness and, less commonly, nausea tend to begin on Monday, increase as the work week progresses and disappear on weekends and during vacations;

[3]Mitchell, Harris "Which Heat is Driest" London Free Press, November 28, 1987.

[4]Footnote 1 above. Also, Eluchok, Bill "Industrial research hygienist has 'sick' buildings for patients", London Free Press.

– the buildings are usually new or refurbished. Re-circulated air is almost always a factor;"

– workers generally have no control over temperature, humidity or lighting in the building.[5]

The articles identify a number of possible sources of indoor air pollution. However, according to these articles, even in buildings where a large number of workers have complaints, air quality tests have seldom identified high levels of air contaminants.

The articles suggest that ventilation may be a particularly important factor in such buildings. One of the articles supplied by the worker quotes the following from a report of an investigation of the worker health complaints at a federal government building, Les Terrasses De La Chaudiere:

> "Overall, the health situation at Les Terrasses is typical of many recent episodes of "building illness" in large modern office blocks in North America and Western Europe. Although this investigation has failed to identify the cause, our findings suggest that imperfect ventilation together with periods of high temperature and low humidity, could be responsible. To the extent that this building was originally planned for predominantly open plan use, and ventilated accordingly, any subsequent partitioning of floor space into closed offices, or use of room dividers which interfered with free air movement, would be likely to aggravate the situation."[6]

The worker placed particular reliance on this passage. He says that his office has imperfect ventilation, together with periods of high temperature and low humidity, and that it was originally designed for open plan use. He argues that the erection of closed in office spaces meant that there is insufficient air circulation.

(b) Medical Opinions re: The Worker's Condition

In 1984, Board doctor Dr. N.B. Hilliard reported the following:

> "The Ministry of Labour was unable to determine any adverse health problems in this particular work environment. The levels of carbon dioxide were commented on, however, this would not be relevant in this case.

[5]Sullivan, John L. (see footnote 1 above).

[6]Sullivan, John L. (footnote 1 above) quoting from an "Investigation of Employee Health Complaints at Les Terrasses de la Chaudiere" by Dr. J. Corbett McDonald, McGill University, Principal Investigator, July 1984.

> Overall, this worker has developed dryness of the mucous membranes due to an inadequacy of the salivary glands. It is not felt that the work environment has caused or has contributed to this condition."

Appeals adjudicator Rudderham asked Dr. Hilliard for additional information. She referred to the fact that the Ministry tests were performed in the summer months. She then asked:

> "In your opinion would testing carried out in either the fall or winter months, when heating systems are in operation, tend to show any different readings? Could there be something in the environment or in the heating system that may be causing [the worker's] problem which would not be detected during the summer months when cooling systems would be in operation?"

She received the following response from Board doctor Dr. Smith:

> "According to the information on file, this man is not exposed to any unusual or exceptional environmental circumstances out of keeping with what workers are exposed to in similar office environments. His exposures would be very similar to our own at Head Office.
>
> It would be recommended that additional input from the Ministry of Labour is not necessary nor would it add any new or additional information which would help us in our final adjudication of this claim. It would be recommended to confirm the recommendation as given in Memo #10 [the memo in which Dr. Hilliard set out her opinion]."

In a report dated February 27, 1984, the worker's specialist, Dr. Yue, gave the following diagnosis and opinion on causation:

> "It is probable that he has an early onset of Xerostomia. It is mainly due to the degeneration of the minor salivary glands in the upper aero-digestive tract. Since the beginning of last Fall, the dry and hot air inside may aggravate his condition."

Dr. Yue examined the worker again in July 1987. At that time he re-stated his opinion that the generalized dryness of the mucous membrane throughout the worker's nose, mouth and throat was mainly due to inadequate production of saliva as a result of the degeneration of the minor salivary glands. He felt this "may be a primary situation with cause unknown." He also expressed the opinion that:

> "The increased room temperature and the low humidity inside during the Winter months may aggravate his condition."

(c) The Panel's Findings

The worker says that he has suffered from "sealed building syndrome". He asked this Panel to declare it to be a disability and find it to be compensable.

The evidence presented indicates that the term "sealed building syndrome" has not been used to describe a particular medical disease. Instead, it has been used to describe a variety of worker health complaints which have been made by a higher than normal proportion of workers working in particular office buildings. The cause of such complaints is still a matter of some speculation – although it appears that poor ventilation combined with periods of high temperature and low humidity may be responsible for increased complaints in some cases.

In view of the fact that the term "sealed building syndrome" describes a fairly disparate collection of complaints rather than a particular medical disease, and the cause of the "syndrome" is uncertain, we are not prepared, on the evidence presented in this case, to find it to be an industrial disease.

Also, with respect to the worker's request that we declare it to be compensable, we note that the facts of each case will determine whether a worker is entitled to benefits. Many of the symptoms or complaints discussed in the articles dealing with sealed building syndrome may cause neither temporary nor permanent disability. According to the articles presented, most of the symptoms complained of are not permanent – they clear up when a worker is removed from the work environment – and many of the symptoms do not prevent workers from performing their regular work.

In this case, the worker is entitled to benefits if he was disabled by a disability which arose out of and in the course of his employment (*Workers' Compensation Act*, R.S.O. 1980, c. 539, ss. 1(1)(a)(iii), 3(1) and 40). The panel therefore asked:

1. Was the worker disabled?

2. If so, what was the likely medical cause(s) of the disability?

3. Did the disability arise out of and in the course of his employment?

On the basis of the evidence of Drs. Yue and Hilliard, we find that the worker has a general dryness of the mucous membrane throughout the anterior part of his nose, mouth and throat.

Dr. Yue says the condition can be aggravated by increased room temperature and low humidity inside during winter months. However, Dr. Yue does not say that the heat and dryness can cause the degeneration of the glands.

The worker's condition is a long term (possibly permanent) condition. There is no suggestion that it will go away if the worker is

removed from the work environment. In fact, the evidence establishes that there have been periods when the worker experienced some problems even when he was removed from the work environment. We also note that the symptomatology and the severity of the worker's problem is unique among his co-workers and it appears to differ somewhat from that described in the articles presented as being associated with poor ventilation and humidity and temperature problems. These facts suggest that the worker has an underlying condition which is not related to the work environment.

We find that the worker has an underlying condition (dryness of the mucous membrane throughout the anterior part of his nose, mouth and throat) which did not arise out of and in the course of employment. It, according to Dr. Yue, was due to the inadequate production of saliva as a result of the degeneration of the minor salivary glands and there is no evidence to suggest that the work environment could cause such degeneration.

We find, however, that the worker's work environment was periodically unusually hot and dry and that this aggravated the worker's underlying condition.

Although the Ministry of Labour air quality tests did not report unusual temperature or humidity levels, these tests were performed in June 1982, and July 1984. The worker testified that his problems generally cleared up by summer – that he experienced problems in the fall to March time period. He was experiencing no problems in the summer of 1984. This seasonal difference in the worker's problems is supported by the medical evidence on file (with the possible exception of problems which occurred in the spring of 1982).

In our view, the timing of the Ministry of Labour tests means that they provide very little assistance with respect to the temperature and humidity levels that would exist during the periods of time the worker experienced problems with his condition.

It is likely that there would be a seasonal variation in the humidity level in this building. The evidence suggests that more fresh air is supplied to the offices in summer (to cool the interior zone of the building). Also, the air taken in in the summer is likely to have a higher relative humidity than that which is taken in in the winter and heated (because warm air can hold more moisture than cold air).

The testimony of the co-worker, and the worker from another office is entirely consistent with that of the worker regarding the seasonal variation of humidity and temperature. They testified that the offices were considerably hotter and drier during the winter months.

Although the Ministry of Labour tests are not of much assistance with regard to the humidity and temperature during the period which is relevant to the worker's disability, the tests do suggest that there may be some ventilation problems. The carbon dioxide levels were much lower than the level of carbon dioxide which would pose a danger to health. However, studies suggest, and the Ministry accepts, that there may be a correlation between carbon dioxide levels and poor ventilation. The

carbon dioxide levels in the worker's office in 1984 were below the Ministry's "action level" but above the level at which the division will recommend that improvements in ventilation be made.

On the basis of the testimony given and the other evidence presented, we find that the worker's work environment was hot and dry during the months that he experienced problems. In view of the fact that the heat control in his office affected an adjacent office which was cooler, we find that the worker's office area was likely even hotter and drier than some of the neighbouring offices during the periods when the building was being heated. Also, the closed nature of the offices likely reduced the benefit the worker would have derived from the interior zone fresh air supply and this may also have contributed to the hot and dry conditions in his office.

Dr. Yue expressed the opinion that the worker's underlying condition could be aggravated by hot, dry air inside during the winter months.

The evidence supports Dr. Yue's opinion that the worker had an underlying condition, but that condition was aggravated by the hot dry air in the worker's office environment during winter months. In January 1984, on his family doctor's advice, the worker stayed off work. According to both the worker and his family doctor, this led to an improvement in his condition, although he continued to have a cough. Likewise, in December 1985 and January 1986, the worker experienced problems even though he was away from the office but these problems were clearing up. However, when he returned to work he experienced a "total recurrence of the tickle, sore throat, uncontrollable spasmodic coughing and fever."

On the basis of the evidence about the work environment and the nature of the worker's disability, we find that he had a non-compensable underlying condition which was aggravated by the unusually hot dry air at work during the periods the office building was heated. The worker is therefore entitled to compensation for the periods when he was disabled from working as a result of the aggravation of his condition.

There was evidence of two such periods. The worker was absent from work on his doctor's advice from January 20 to February 3, 1984. Also, according to Dr. Miller's letter, she authorized the worker's absence from work for this disability for two half days on January 9 and 10, 1986. We find that the worker is entitled to full temporary disability benefits for these two periods.

The Decision

The worker's appeal is allowed. The worker is entitled to full temporary disability benefits for the period from January 20 to February 3, 1984, and for two half days on January 9 and 10, 1986.

Appeal allowed.

DECISION NO. 235/88

Panel: Faubert (Chairman), Cook, Guillemette

Decision – May 30, 1988.

Commutation (debt liquidation) – Board Directives and Guidelines (commutation) (standard of review) – Employment (retirement).

Retired worker requesting commutation of pension for purpose of debt liquidation – No vocational rehabilitative aspect to commutation for retired worker – In circumstances, appropriate to consider rehabilitative effect of commutation in broader terms together with long term best interests of worker.

A 68-year-old retired worker was receiving a pension, valued at $41,500. He lived on his farm which he had owned for 40 years. If unable to pay off a bank debt of $28,000, he would lose the farm. The worker appealed a decision of the hearings officer denying the worker's request for full commutation of his pension. The appeal was allowed in part.

Previous Board policy on commutation of pensions contained a rehabilitative thrust but there was no direct connection between commutation and employment. New Board policy on commutations, approved April 3, 1987, required a rehabilitative aspect to the commutation to enable the person to obtain or maintain suitable employment.

The worker did not meet the requirements of the new policy. A retired worker could not meet the vocational rehabilitation aspect of the policy. However, nothing in s. 26(1) of the *Workers' Compensation Act* would restrict its operation to workers who have not retired. The absence of guidelines applicable to the circumstances of retired workers should not preclude granting a commutation in appropriate circumstances.

Since commutation did not have an obvious role to play in lessening the worker's disability or aiding in getting him back to work, it was appropriate to consider the rehabilitative effect of the commutation in broader terms while having regard to the long term best interest of the worker. In this case, the commutation would remove a major debt the worker was unable to pay and would be socially rehabilitative in terms of allowing him to stay on his farm and in the community. The worker was granted a partial commutation to pay off the debt.

WCAT Decisions considered
Decision No. 146 (1986), 2 W.C.A.T.R. 91 (Ont. W.C.A.T.) – referred to.
Decision No. 126/87 (12 December 1987) (Ont. W.C.A.T.) – considered.
Decision No. 406/87 (14 May 1987) (Ont. W.C.A.T.) – referred to.

Statutes considered
Workers' Compensation Act, R.S.O. 1980, c. 539 –
s. 26(1)

WCB Directives and Guidelines considered
Board Policies and Divisional Administrative Guidelines, Vocational Rehabilitation Division –
Document No. 04/01/02

APPEAL by the worker from a decision of the hearings officer denying commutation of the worker's pension.